



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/624,557	07/23/2003	Kenichiro Sugiyama	500.42965X00	6625

20457 7590 03/02/2005

ANTONELLI, TERRY, STOUT & KRAUS, LLP
1300 NORTH SEVENTEENTH STREET
SUITE 1800
ARLINGTON, VA 22209-9889

EXAMINER

HABERMEHL, JAMES LEE

ART UNIT PAPER NUMBER

2651

DATE MAILED: 03/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/624,557	Applicant(s) SUGIYAMA ET AL.	
	Examiner James L Habermehl	Art Unit 2651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5 is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 4 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>23 Jul 03</u> . | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2651

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.
2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-2 and 4 are rejected under 35 U.S.C. 102(e) as being anticipated by Szita ('084). Szita ('084) Figure 9 meets all the limitations of the claim, including recording a first servo pattern for detecting position information of the head (904), recording a second servo pattern (912) by detecting the position information of the head based on the recorded first servo pattern (906) and by positioning the head to a target position based on the detected position information (908/910), wherein position information of the head detected in the second servo pattern recording step is recorded on the magnetic disk (932).

Regarding claim 2, the second servo pattern and the position information of the head are recorded in areas separated circumferentially by data areas (col. 18, lines 60-62 and col. 20, lines 3-5).

Regarding claim 4, the computation steps 926/928/930 and writing step 932 must necessarily include storing the head position information in a memory in the disk drive controller

Art Unit: 2651

as it performs these steps before recording it on the disk after the second servo pattern recording for the loop of track is finished.

4. Claim 5 is allowed over the prior art of record. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The following is a statement of reasons for the indication of allowable subject matter:

Claim 3 is allowable over the prior art of record since the cited references taken individually or in combination fails to particularly disclose a servo pattern recording method comprising the position information of the head detected in the second servo pattern recording step is recorded on the magnetic disk during the second servo pattern recording step, as presented in the environment of claim 3. It is noted that the closest prior art, Szita ('084), shows a servo pattern recording method similar to the claimed invention. However, Szita ('084) fails to disclose the position information of the head detected in the second servo pattern recording step is recorded on the magnetic disk during the second servo pattern recording step as claimed.

Claim 5 is allowable over the prior art of record since the cited references taken individually or in combination fails to particularly disclose a servo pattern recording apparatus comprising means for detecting the position information of the head and recording a second servo pattern for positioning the head based on the detected position information, and also recording the position information of the head, as described in Figure 10 and specification p. 17, line 1 through p.18, line 4 and presented in the environment of claim 5. It is noted that the closest prior art, Szita ('084), shows head gimbal assembly testing similar to the claimed

Art Unit: 2651

invention. However, Szita ('084) fails to disclose the position information of the head detected in the second servo pattern recording step is recorded on the magnetic disk during the second servo pattern recording step as described in Figure 10 and specification p. 17, line 1 through p.18, line 4 and as claimed.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hirano et al. Figures 1-3 and 9-13, Ashikaga et al. Figures 8A-10, Baumann et al. Figures 3-9, Szita ('963) Figures 3 and 6, Chew Figure 6, and Yasuna et al. Figures 1-2 are similar to applicant's invention.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James L Habermehl whose telephone number is (703)305-6975. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on (703)308-4825. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Habermehl/jlh
22 Feb 05



DAVID HUDSPETH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600